Before the
Federal Communications Commission
Washington D.C. 20554

In the Matter of	)	
	)	
Advanced Television Systems	)	MB Docket No. 87-268
And Their Impact on the	)	
Existing Television Broadcast	)	
Service	)	

To: The Commission

PETITION FOR RECONSIDERATION

Gray Television, Inc. ("Gray Television"), by its attorneys, hereby submits this Petition for Reconsideration of the Seventh Report and Order in the above referenced docket, in which the Commission set forth in Appendix B to the Seventh Report and Order a new table of allotments for post-transition digital television service (the "DTV Table"). Gray Television hereby requests that the Commission make the following changes to the DTV Table for four of its stations:

Call Sign	Facility ID	Location	Proposed Change
WTOK-TV	4686	Meridian, MS	Increase ERP to 11.7 kW (from 6.15 kW)
WILX-TV	6863	Onondaga, MI	Increase ERP to 14.8 kW (from 11.6 kW)
WBKO(TV)	4692	Bowling Green, KY	Increase ERP to 12.5 kW (from 7.65 kW) and correct facility coordinates
WCAV(TV)	363	Charlottesville, VA	Change Antenna ID to 66109 (113.5° rotation)

In addition, Gray Television requests that the Commission amend the DTV Table's coordinates for certain of its other stations to conform to the coordinates for those stations' ASRs.

I. Requests for Increase of Effective Radiated Power For Stations Returning to the VHF Band.

Many UHF stations, which have elected to return to their analog channel for post-transition operations, will be unable to build a facility that replicates their Grade B analog contour without exceeding their allotted digital contour. This inequity results because in determining the allotment for UHF stations, the Commission capped effective radiated power ("ERP") at 1,000 kW, even though, in some cases, this prevented an exact contour match. When these stations now seek to carry back their digital UHF channel allotment to their elected analog channel, the Commission's engineering method determines the power to match the 1,000 kW digital contour, not the larger analog Grade B contour that stations contemplated when certifying to construct replication facilities. This surely unintentional shrinking of stations' contours leaves many UHF stations with facilities that only approximate the facilities they certified to replicate and provides stations no date certain when they will be able to seek authority to expand their contour.

Gray Television therefore requests that the Commission modify the DTV Table to increase the ERP of three of its stations, as described in the attached Engineering Statement, WTOK-TV, WILX-TV, and WBKO(TV).[1] Each of these stations will be returning to their respective VHF channels after the transition, and each requested replication and received a 1,000 kW pre-transition digital allotment. Like other similarly situated licensees returning to the VHF band after the transition, WTOK-TV, WILX-TV, and WBKO(TV) will otherwise be unable to replicate their analog Grade B contour and

[1] *See Engineering Statement*, prepared for Gray Television, Inc. by Joseph M. Davis of Chesapeake RF Consultants, LLC.

are precluded from filing to maximize their contour because of the current filing freeze related to contour expansion.

II. Request to Correct Coordinates

Gray Television hereby requests that the Commission correct the DTV Table to conform it to the coordinates of the ASR associated with the stations identified in Table A attached hereto, whose DTV Table coordinates differ from their ASR coordinates by less than three seconds, which Commission has previously deemed to be a *de minimis* correction of the DTV Table.[2]

Four other of Gray Television's stations, identified in Table B attached hereto, require corrections that exceed three seconds. Three of these stations, WRWD-TV, Augusta, Georgia, KGIN(TV), Grand Island, Nebraska, and KOLN(TV), Lincoln, Nebraska, have filed minor modification applications and have been awarded construction permits (for which Gray Television will shortly request licenses to cover) reflecting the actual ASR coordinates.

For KWTX-TV, Gray Television would note that the Commission's databases presently show the correct location of the station's ASR. The DTV Table, however, places KWTX-TV at coordinates that differ by for seconds longitude from the location indicated in the Commission's databases. Gray Television is unaware of the origin of this discrepancy and therefore respectfully requests that the Commission correct the DTV Table to conform with KWTX-TV's actual ASR coordinates, notwithstanding the fact that its request involves a modification of more than three seconds longitude.

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[2] *See Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, Seventh Report & Order*, MB Docket No. 87-268, FCC 07-138, ¶ 35, released Aug. 6, 2007.

III. Request to Change Antenna Pattern for WCAV(TV)

Gray Television owns one singleton station, WCAV(TV). Two weeks after the Commission implemented its freeze on filings to modify analog or DTV allotments,[3] Gray Television acquired WCAV(TV).[4] Thus, the channel election process provided Gray Television with only one choice for WCAV(TV): it could "elect" to operate its post-transition DTV facility based on WCAV(TV)'s current analog authorization.[5] The Commission subsequently assigned WCAV(TV) a digital allotment authorizing operation on Channel 19 at a power level of 50 kW. WCAV(TV)'s allotment was based on a theoretical directional antenna pattern.[6]

Because of differences in computing contours in the analog and digital services, the theoretical directional antenna pattern that the Commission incorporated into WCAV(TV)'s digital Channel 19 allotment is inferior to WCAV(TV)'s current analog authorization.[7] The end result is a digital theoretical pattern that has a much deeper region of suppression than the analog pattern. In order to avoid a contour extension, at the time of its flash-cut, WCAV(TV) would be initially limited to operation at 17.3 kW with the licensed analog directional pattern instead of its allotted 50 kW. This represents a 4.6 dB attenuation of WCAV(TV)'s allotted signal. The effects of this power reduction are severe: the population that will actually be able to receive post-transition service from

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[3] *See Public Notice, "Freeze on the Filing of Certain TV and DTV Requests for Allotment or Service Area Changes,"* DA 04-2446 (MB rel. Aug. 2, 2004) ("2004 Filing Freeze PN").

[4] *See* FCC File No. BAPCT-20040316AJT. The Commission consented to the assignment of WCAV to Gray on May 28, 2004, and the transaction was consummated on August 17, 2004.

[5] *See* BCERCT - 20041104BCC.

[6] *See* DTV Table of Allotments.

[7] *See* Engineering Statement.

WCAV(TV) will be sixteen percent smaller than the population currently receiving analog service from the station. Gray Television therefore requests that the Commission replace the antenna pattern allocated to WCAV(TV) in the DTV Table with the antenna pattern currently authorized for WCAV(TV)'s analog Channel 19 in order to allow WCAV(TV) to flash-cut to digital operations at 50 kW ERP. As demonstrated in the attached Engineering Statement, this proposed modification of WCAV(TV)'s antenna pattern will not cause more than 0.1 percent interference to another station. [8]

IV. Conclusion

Allowing the requested changes to the DTV Table will allow WTOK-TV, WILX-TV, WBKO(TV) and WCAV(TV) would serve the public interest by ensuring that stations can continue to serve their current audiences. Moreover, by permitting the requested modifications, the Commission would avoid any disruption to these stations' analog and digital viewers in the final months leading up to the February 17, 2009 digital transition deadline. In the Third Periodic Review, the Commission stated that it was "critically important that analog over-the-air viewers who obtained the necessary digital receivers . . . [be] able to receive DTV service over-the-air on and after the transition date."[9] By permitting the requested changes, the Commission will facilitate a seamless transition for the stations' viewers.

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[8] *See* Engineering Statement.

[9] *Third Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television, Notice of Proposed Rule Making*, MB Docket No. 07-91, FCC 07-70, ¶ 46, released May 18, 2007 ("Third Periodic Review").

Significantly, the requested modifications of the DTV Table will not cause impermissible levels of interference to other stations.[10]

Therefore, in order to avoid the loss of free over-the-air service to portions of the stations' audiences, Gray Television respectfully requests that the Commission modify the DTV Table as requested herein.

Respectfully Submitted,

GRAY TELEVISION, INC.

By: _____

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Dated: October 26, 2007

[10] *See* Engineering Statement.

Table A
Corrections of Fewer than Three Seconds

Call	Location	Ch.	Facility ID	Appendix B Coordinates -----latitude----			----longitude----			Corrected Coordinates (ASR) ASR#	-----latitude----			----longitude----			correction amount
WTVY	AL DOTHAN	36	4152	30	55	10	85	44	28	1056648	30	55	11	85	44	30	1-sec lat, 2-sec lon
KKTV	CO COLORADO SPRINGS	10	35037	38	44	41	104	51	41	1024861	38	44	42	104	51	43	1-sec lat, 2-sec lon
WJHG-TV	FL PANAMA CITY	7	73136	30	26	00	85	24	51	1029017	30	25	59	85	24	51	1-sec lat
KUPK-TV	KS GARDEN CITY	13	65535	37	39	00	100	40	06	1033277	37	39	01	100	40	06	1-sec lat
WIBW-TV	KS TOPEKA	13	63160	39	00	19	96	02	58	1032648	39	00	22	96	02	57	3 sec lat, 1-sec lon
WBKO	KY BOWLING GREEN	13	4692	37	03	52	86	26	07	1048806	37	03	49	86	26	07	3 sec lat
WOWT-TV	NE OMAHA	22	65528	41	18	40	96	01	37	1026518	41	18	40	96	01	40	3 sec lon
WEAU-TV	WI EAU CLAIRE	13	7893	44	39	51	90	57	41	1033664	44	39	50	90	57	40	1-sec lat, 1-sec lon
WSAW-TV	WI WAUSAU	7	6867	44	55	14	89	41	31	1066073	44	55	14	89	41	28	3-sec lon
WTAP-TV	WV PARKERSBURG	49	4685	39	20	59	81	33	56	1239800	39	21	00	81	33	56	1-sec lat

Table B
Corrections of More than Three Seconds

Call	Location	Ch.	Facility ID	Appendix B Coordinates -----latitude----			----longitude----			Corrected Coordinates (ASR) ASR#	-----latitude----			----longitude----			correction amount
WRDW-TV	GA AUGUSTA	12	73937	33	24	29	81	50	36	1059411	33	24	36	81	50	37	7-secs lat, 1-sec lon
KGIN	NE GRAND ISLAND	11	7894	40	35	20	98	48	10	1041794	40	35	14	98	48	10	6-secs lat
KOLN	NE LINCOLN	10	7890	40	48	08	97	10	46	1041796	40	48	11	97	10	52	3-secs lat, 6-secs lon
KWTX-TV	TX WACO	10	35903	31	19	19	97	18	58	1046229	31	19	19	97	19	02	4-secs lon

Engineering Statement

prepared for

Gray Television Licensee, Inc.

This engineering statement has been prepared on behalf of *Gray Television Licensee, Inc. ("Gray")*, in support of a *Petition for Reconsideration* being filed in the *Seventh Report and Order ("SR&O")* concerning final digital television station channel parameters, Media Bureau Docket 87-268.[1] The subject docket sets forth a new digital television ("DTV") allotment table for the post-transition period. Appendix B of the *SR&O* provides channel and other technical parameters for each eligible television station. *Gray* requests herein that alternative technical parameters be employed for four of its stations.

Gray is requesting changes to the following stations:

Call	Location	Facility ID	Proposed Change
WTOK-TV	Meridian, MS	4686	Increase ERP to 11.7 kW (from 6.15 kW)
WILX-TV	Onondaga, MI	6863	Increase ERP to 14.8 kW (from 11.6 kW)
WBKO(TV)	Bowling Green, KY	4692	Increase ERP to 12.5 kW (from 7.65 kW) and Coordinate Correction
WCAV(TV)	Charlottesville, VA	363	Change Antenna ID to 66109 (113.5° rotation)

Power Increases (WTOK-TV, WILX-TV, and WBKO)

The *SR&O* (¶65-67) granted the requests of several commenters in the proceeding to increase the effective radiated power ("ERP") for their final digital allotments, in cases where they (1) had elected replication, (2) were originally assigned a 1000 kW transitional UHF allotment, and (3) had successfully elected to return to their VHF analog channels. In these cases, the 1000 kW transitional digital channel's coverage contour fell short of the associated analog Grade B contour due to the 1000 kW power limitation for UHF digital operations. When the FCC's procedures carried the transitional UHF digital allotment back to the original VHF channel, the resulting digital power was set to match the UHF digital coverage contour area, not the larger, VHF analog Grade B contour area. In the *SR&O*, the ERP's for some stations in this category were raised to provide a match of

[1] *Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*, MB Docket No. 87-268, FCC 07-138, released August 6, 2007.

their original analog Grade B contour, where such a change complied with the 0.1 percent interference limit.

Gray is herein seeking the same treatment for its stations WTOK-TV, WILX-TV, and WBKO, all of which fall under the same circumstances. Each station's digital ERP in the *SR&O* corresponds to a match of their transitional 1000 kW digital allotment. As proposed herein, the ERP for each final digital allotment will be raised in order to match the contour location of the licensed analog Grade B contour.

In support of *Gray's* request, interference evaluation per OET Bulletin 69[2] shows that the proposed changes will not cause interference to any other station in excess of 0.1 percent. The interference analysis results are provided in **Tables 1, 2,** and **3** for WTOK-TV, WILX-TV, and WBKO,[3] respectively.

Coordinate Correction (WBKO)

A number of geographic coordinate adjustments were made in the *SR&O* (¶35) in cases to correspond to the associated Antenna Structure Registration ("ASR") data where the change was three seconds or less. For licensed facilities, a three-second coordinate correction can generally be accomplished by filing Form 302 to modify a license, without the need for a Construction Permit. The Appendix B coordinates for *Gray's* station WBKO vary by three seconds in latitude from the associated ASR (number 1048806). *Gray* requests that the Appendix B coordinates for WBKO be corrected as shown in the following.

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[2] FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 ("OET-69"). The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. A standard cell size of 2 km was employed with 2000 Census data. Comparisons of various results of this computer program (run on a Sun Sparc processor) to the Commission's implementation of OET-69 show excellent correlation.

[3] The interference analysis provided in **Table 3** for WBKO also considers the coordinate correction discussed in the next section.

WBKO		
NAD-27 Coordinates	Appendix B	Corrected to: ASR #1048806
N – Latitude	37° 03' 52"	37° 03' **49**"
W- Longitude	86° 26' 07"	86° 26' 07"

Directional Antenna Pattern Change (WCAV)

Gray's WCAV on Channel 19 is a "singleton" facility authorized after April 3, 1997 and therefore does not have a companion digital channel. The *SR&O* Appendix B parameters for WCAV are based on replication of the authorized analog directional operation and provides for a "flash-cut" to digital operation at 50 kW ERP on Channel 19. The *SR&O* Appendix B data includes a specific hypothetical directional pattern for WCAV which corresponds generally to the pattern associated with the authorized analog operation, but the pattern has become distorted with the FCC's "carry over" procedure to the final channel due to the impact of non-uniform terrain and differences in the F(50,50) and F(50,90) propagation curves. Implementation of the Appendix B hypothetical antenna pattern with the actual, authorized WCAV directional antenna would require that the ERP be reduced by 4.6 dB to 17.3 kW in order to avoid exceeding the allotment parameters along any azimuth. This power reduction would result in a post-transition service population for WCAV of 320,793 persons, which is 84.0 percent of WCAV's population listed in Appendix B (381,803 persons).

Gray is requesting that the actual antenna pattern authorized for the WCAV analog Channel 19 be substituted for the Appendix B hypothetical antenna pattern. This would allow WCAV to flash-cut to digital operation without a power reduction, at the allotted 50 kW ERP. **Table 4** supplies the relative field values for the present Appendix B hypothetical pattern (FCC Antenna ID 74743) along with the proposed pattern corresponding to the analog WCAV operation (Antenna ID 66109). Directional pattern plots are depicted in **Figure 1.** OET Bulletin 69 analysis results are provided in **Table 5** which shows that the proposed change will not cause interference to any other station in excess of 0.1 percent.

Note that the authorized WCAV analog Channel 19 directional antenna pattern (Antenna ID 66109) is supplied in CDBS data as relative field values plus a rotation angle of 113.5 degrees.

Table 4 provides the same pattern data in two columns; one column without any rotation and one column is with 113.5 degrees rotation. Since Appendix B does not include any pattern rotation specifications, it is recommended that the pattern data with rotation be employed for WCAV should the Commission grant this request.

General

It is acknowledged that in seeking the modified parameters requested herein for all four allotments, *Gray* will accept interference from any other digital allotment already approved. The service and interference statistics for the present and proposed parameters are summarized on each interference summary table.

The engineering analysis was conducted using the same methodology as described in the *Second DTV Periodic Review Order*[4] that the Commission's staff employed to identify conflicts during the three election rounds, as described in the following text from the *Further Notice of Proposed Rulemaking* underlying the *SR&O* (¶ 21):

> "New interference to post-transition DTV operations was defined as interference beyond that caused by existing analog and DTV operations, as set forth in the certification database information. ... . In performing conflict analyses, the staff applied the standard that an interference conflict exists when it was predicted that more than 0.1 percent new interference would be caused to another station."

[4]*Second Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television,* MB Docket 03-15, FCC 04-192, Released September 7,2004.

The undersigned hereby certifies that the foregoing statement was prepared by him or under his direction, and that it is true and correct to the best of his knowledge and belief.

Joseph M. Davis, P.E.
October 24, 2007

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List of Attachments

Table 1	WTOK-TV Interference Analysis Results Summary
Table 2	WILX-TV Interference Analysis Results Summary
Table 3	WBKO(TV) Interference Analysis Results Summary
Table 4	WCAV(TV) Antenna Pattern Data
Figure 1	WCAV(TV) Directional Antenna Pattern Plots
Table 5	WCAV(TV) Interference Analysis Results Summary

Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Table 1

Interference Analysis Results Summary

prepared for

Gray Television Licensee, Inc.

WTOK-TV Meridian, MS

ERP Raised to 11.7 kW

Ch	Call Sign Service	State/City Facility ID	Power (kW) HAAT (m)	Latitude Longitude	Dist (km) Bear (°T)	Baseline Population (2000 Census)	New Interference Population	 Percent
10	WMAB-TV	MS MISSISSIPPI STATE 43192	4.3 349	33 21 14 89 9 0	121.7 339.5	351,064	0	0.00%
10	WBIQ	AL BIRMINGHAM 717	3 426	33 29 4 86 48 25	218.0 53.3	1,535,099	0	0.00%
11	WYES-TV	LA NEW ORLEANS 25090	70.8 306	29 57 13 89 56 58	289.2 204.7	1,895,134	0	0.00%
11	KAQY	LA COLUMBIA 52046	17.799 572	32 3 19 92 11 12	331.0 265.7	673,497	0	0.00%
12	WJTV	MS JACKSON 48667	17.93 464	32 14 26 90 24 15	161.7 267.0	792,851	0	0.00%

WTOK-TV Service Area and Population Data	Present	Proposed
Service Area (sq. km)	18,166.90	21,133.80
Service Population (2000 census)	254,394	292,708
Interference	2.32%	1.67%

Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Table 2

Interference Analysis Results Summary

prepared for

Gray Television Licensee, Inc.

WILX-TV Onondaga, MI

ERP Raised to 14.8 kW

Ch	Call Sign Service	State/City Facility ID	Power (kW) HAAT (m)	Latitude Longitude	Dist (km) Bear (°T)	Baseline Population (2000 Census)	New Interference Population	 Percent
9	WWTV	MI CADILLAC 26994	20.058 497	44 8 12 85 20 33	198.3 342.0	810,940	0	0.00%
10	WOIO	OH SHAKER HEIGHTS 39746	3.5 304	41 23 15 81 41 43	265.9 115.3	3,501,058	0	0.00%
10	WCPO-TV	OH CINCINNATI 59438	15.4 305	39 7 31 84 29 57	368.4 179.0	2,791,794	0	0.00%
10	WWTO-TV	IL LASALLE 998	16 403	41 16 51 88 56 13	384.7 251.8	2,443,671	0	0.00%
10	WWUP-TV	MI SAULT STE. MARIE 26993	16.316 370	46 3 49 84 6 8	404.1 5.2	102,323	0	0.00%
10	WTHI-TV	IN TERRE HAUTE 70655	14.182 293	39 14 36 87 23 7	427.2 214.6	738,956	0	0.00%
11	WGVU-TV	MI GRAND RAPIDS 24784	50 238	42 57 35 85 53 45	122.7 298.5	1,647,055	401	0.02%
11	WTOL	OH TOLEDO 13992	13.062 263	41 40 22 83 22 47	130.6 130.6	2,386,404	157	0.01%

WILX-TV Service Area and Population Data	Present	Proposed
Service Area (sq. km)	26,527.10	27,633.60
Service Population (2000 census)	2,284,050	2,420,245
Interference	1.18%	2.22%

Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Table 3

Interference Analysis Results Summary

prepared for

Gray Television Licensee, Inc.

WBKO(TV) Bowling Green, MI

ERP Raised to 12.5 kW

Coordinates set to match ASR 1048806

Ch	Call Sign Service	State/City Facility ID	Power (kW) HAAT (m)	Latitude Longitude	Dist (km) Bear (°T)	Baseline Population (2000 Census)	New Interference Population	 Percent
13	WKYT-TV	KY LEXINGTON 24914	30 282	38 2 23 84 24 10	209.7 58.2	916,604	0	0.00%
13	WRCB-TV	TN CHATTANOOGA 59137	34.8 335	35 9 40 85 18 51	234.0 154.2	1,040,218	0	0.00%
13	WTHR	IN INDIANAPOLIS 70162	15.089 299	39 55 43 86 10 55	318.8 3.9	2,404,787	0	0.00%
13	WHBQ-TV	TN MEMPHIS 12521	12.925 308	35 10 28 89 50 41	371.7 236.6	1,451,075	0	0.00%
13	WLOS	NC ASHEVILLE 56537	29.8 853	35 25 32 82 45 25	377.3 117.8	2,465,610	0	0.00%
13	WVTM-TV	AL BIRMINGHAM 74173	16.934 408	33 29 26 86 47 48	397.8 184.8	1,618,403	0	0.00%
13	WCFN	IL SPRINGFIELD 42116	5.078 183	39 47 27 89 30 53	404.9 319.5	551,400	0	0.00%
13	WOWK-TV	WV HUNTINGTON 23342	15.96 396	38 30 21 82 12 33	405.2 65.4	1,032,603	0	0.00%

WBKO Service Area and Population Data	Present	Proposed
Service Area (sq. km)	20,962.40	22,833.00
Service Population (2000 census)	542,050	600,806
Interference	2.12%	1.82%

Table 4
WCAV Antenna Pattern
prepared for
Gray Television Licensee, Inc.

Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

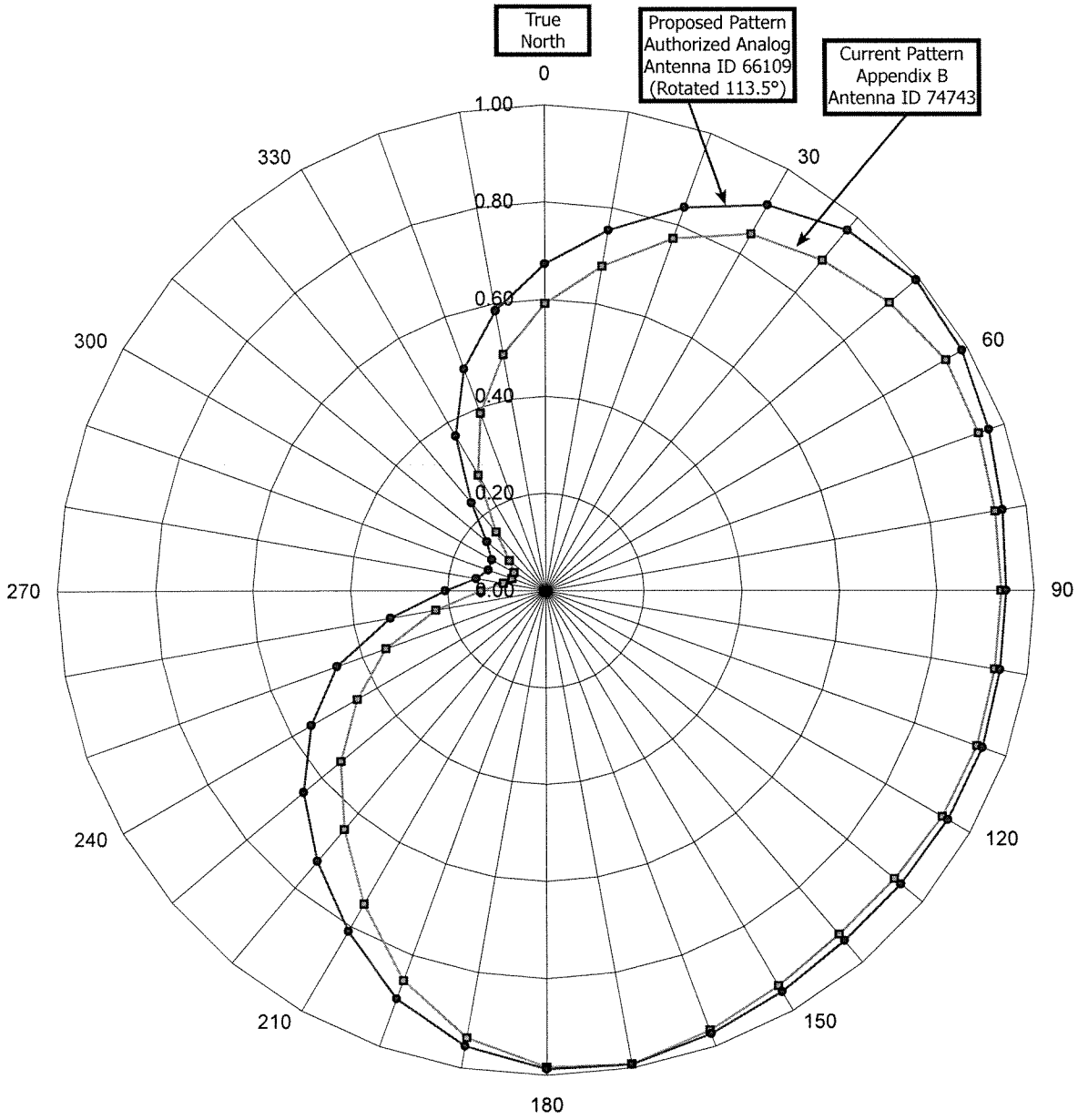
WCAV(TV) Ch. 19 Charlottesville, VA
----------Relative Field----------

Azimuth (°T)	Current Pattern Appendix B Antenna ID 74743	Proposed Pattern Authorized Analog Antenna ID 66109 (before required rotation)	Proposed Pattern Authorized Analog Antenna ID 66109 (rotated 113.5°)
0	0.591	0.950	0.672
10	0.677	0.945	0.752
20	0.770	0.940	0.838
30	0.846	0.945	0.915
40	0.886	0.960	0.966
50	0.922	0.980	0.993
60	0.948	1.000	0.987
70	0.945	0.980	0.967
80	0.935	0.940	0.951
90	0.932	0.870	0.942
100	0.932	0.780	0.943
110	0.937	0.700	0.949
120	0.934	0.620	0.947
130	0.925	0.520	0.942
140	0.926	0.420	0.943
150	0.941	0.270	0.955
160	0.965	0.170	0.973
170	0.992	0.130	0.993
180	0.983	0.120	0.987
190	0.936	0.130	0.954
200	0.855	0.170	0.895
210	0.746	0.270	0.811
220	0.643	0.420	0.728
230	0.548	0.520	0.648
240	0.447	0.620	0.555
250	0.348	0.700	0.455
260	0.228	0.780	0.323
270	0.132	0.870	0.205
280	0.087	0.940	0.144
290	0.073	0.980	0.124
300	0.075	1.000	0.126
310	0.096	0.980	0.156
320	0.157	0.960	0.235
330	0.274	0.945	0.367
340	0.388	0.940	0.485
350	0.493	0.945	0.585
Additional Azimuths:			
173.5			1.000
174	1.000		
175	1.000		

Figure 1
Directional Antenna Pattern
WCAV(TV) Ch. 19 Charlottesville, VA
Facility ID 363

prepared for
Gray Television Licensee, Inc.

October, 2007



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Radiofrequency Consulting Engineers
Digital Television and Radio

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Radiofrequency Consulting Engineers
Digital Television and Radio

Table 5

Interference Analysis Results Summary

prepared for

Gray Television Licensee, Inc.

WCAV(TV) Charlottesville, VA

Change to Authorized Directional Antenna Pattern

Ch	Call Sign Service	State/City Facility ID	Power (kW) HAAT (m)	Latitude Longitude	Dist (km) Bear (°T)	Baseline Population (2000 Census)	New Interference Population	 Percent
18	WDBJ	VA ROANOKE 71329	605 610	37 11 42 80 9 22	171.9 239.8	1,300,100	0	0.00%
19	WTWB-TV	NC LEXINGTON 35385	800 576	35 52 2 79 49 26	263.6 207.3	3,916,809	0	0.00%
19	WVAH-TV	WV CHARLESTON 417	475 514	38 24 28 81 54 13	303.5 280.0	1,257,151	0	0.00%
19	WUNM-TV	NC JACKSONVILLE 69444	66.58 561	35 6 18 77 20 15	335.5 162.0	786,217	0	0.00%
19	WKPT-TV	TN KINGSPORT 27504	166.67 699	36 25 52 82 8 17	367.5 243.0	812,995	0	0.00%
20	WJPR	VA LYNCHBURG 24812	400 500	37 19 14 79 37 58	125.5 234.3	823,174	316	0.04%

WCAV Service Area and Population Data	Present	Proposed
Service Area (sq. km)	14,121.60	14,392.60
Service Population (2000 census)	381,803	396,151
Interference	1.19%	1.26%